No 5

THOUGHTS
ON
BRIGHTHELMSTON.
CONCERNING
SEA-BATHING,
AND
DRINKING SEA-WATER.

With ſome DIRECTIONS for their USE.

IN A LETTER TO A FRIEND.

WITH AN
APPENDIX,

Giving an Account of the Salt-Water Baths at that Place.

By JOHN AWSITER,
PHYSICIAN,
And Profeſſor of Chemiſtry to the Royal Incorporated Society of Artiſts.

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THOUGHTS

ON

BRIGHTELMSTON.

Tandem ad illud remedium perventum fuerit, cui quaſi genuinè morbus cedit. SYD. *L. proc. int.*

SIR,

IT may be thought that the utility of Bathing in the Sea, and Drinking Sea-Water has been ſo fully diſcuſſed, by ſeveral ingenious gentlemen, and particularly Dr. Ruſſel, whoſe name deſerves to be remembered for the lights he has thrown on this ſubject, nothing new or intereſting can be offered on it: But, Sir, I had not been at Brightelmſton above three days, before ſeveral particulars preſented themſelves, which makes a further diſcuſſion on Bathing in and Drinking Sea-Water neceſſary.

When I conſider the elegant and polite taſte of the readers into whoſe hands this may fall, it becomes an arduous undertaking; I ſhall therefore communicate my ſentiments free-

ly, but in a conciſe and plain manner, that I may not intrude on their time too much.

ON BATHING.

Bathing in the ſea for pleaſure, ariſes from two motives, the love of cleanlineſs, and the refreſhment that cold bathing affords the body, by bracing and cooling it. To this a bold ſandy ſhore contributes, where the water is clear, and free from the mixture of muddy freſh waters, which always depoſite a quantity of filth; where the deſcent of the ſhore is gradual, not rocky; and where the tides do not ſuddenly riſe, to make bathing dangerous: Such a ſhore for ſea-bathing is to be preferred, and the perfection of ſuch a ſhore Brightelmſton can boaſt. But with all theſe advantages, there are inconveniencies which attend ſea-bathing here; yet none but what may be eaſily remedied, by a proper attention of the inhabitants.

The coaſt of Brightelmſton being open to the main ſea, there is no ſhelter to the Bathers from the wind, which ſets in to this ſhore almoſt conſtantly; and, if the weather is not very ſerene, the great agitation of the water occaſioned thereby, makes the bathing oftentimes diſagreeable, not to ſay dangerous, more eſpecially to the ladies. This inconvenience may be remedied by a different poſition of the bathing machines while in uſe.

I would recommend that one half the number of machines, at leaſt, be provided with ſkreens, to extend projectingly from the top of the door to the water, ſomewhat after the manner of thoſe at Margate; theſe would keep off the wind, and make the machines more private. To this may be objected, the force of the waves, and ſtrength of the wind, which might overſet

overſet the machines ſo provided; but this inconvenience is eaſily remedied.

When the ſea is much troubled, the machines ſhould be turned, and puſhed backwards a ſufficient depth into the ſea, that the perſon bathing may go into the water with his face to the ſhore, and from this poſition of the machine will ariſe two advantages: The waves will be prevented from breaking againſt the door of the machine, and wetting the party while *undreſſing* or *dreſſing*, and the machine by being placed between the perſon bathing and the ſea, will break off the force of the waves, and be a ſhelter from the wind; and when ſeveral are placed near to each other, after this manner, the ſhelter of them will be very conſiderable, and conſequently the bathing rendered much more comfortable. I think the ſhore on the Eaſt of the town is allotted to the uſe of the ladies, without any mixture of gentlemen, and I think a further rule ſhould take place: That no man ſervant or inhabitant, be permitted to bathe on that ſide of the town during the ſeaſon.

It has been a notion generally received, though very erroneouſly, that bathing is moſt wholſome in cold weather, the blood and humours not being ſo liable to agitations as in Summer heats: The utmoſt force of which mode of reaſoning centres thus; by bathing in cold weather only, the perſon who bathes has it not ſo much in his power to hurt himſelf by imprudence.

The pores of the ſkin are more cloſed, and perſpiration carried on more ſparingly in cold weather, and when very cold the pores will be braced ſometimes to a degree of rigidity, whereby the humours neceſſary to be breathed off, by the ſkin, are interrupted, and often occaſion fixed pains in the limbs; in theſe caſes cold bathing will not open the pores properly,, and we muſt have recourſe to the temperate bath and friction The

Germans, in ſuch caſes, relieve themſelves by warm medicated baths ; and though it is a cuſtom among the Ruſſians to uſe cold bathing, to inure them to the extremes of their climate, we are informed that they go into the warm bath firſt ; and, at any rate, water in a fluid ſtate in their country, during the colder months, muſt be warmer than their atmoſphere.

We find that bathing was never much practiſed in Northern countries ; but if we turn our eyes to the Eaſtern and warmer climes, we can trace it back a great way into antiquity. Bathing was a cuſtom prevalent with the Ægyptians, or Pharaoh's daughter would not have found Moſes among the bulruſhes ; probably it was a part of their law, a religious inſtitution to prevent the ravages of the Plague, which ſo continually ſwept off numbers of their people. From theſe motives alſo bathing became a part of the Jewiſh religion, the Moſaic law being partly founded on thoſe of the Ægyptians ; it is thus uſed among the Turks and Mahometans, and of the pleaſure-baths of theſe people, Lady Mary Wortley Montague has lately given us ſome account.

The propriety of bathing in hot countries is obvious, for when the pores of the body are relaxed, the ſpirits waſted, and the ſkin alſo fouled by great diſcharges of ſweat, ariſing from intenſe heat, what can ſo ſoon cleanſe the ſkin, recruit the ſpirits, and reſtore the body, under theſe circumſtances, as bathing.

It is to be obſerved, that bathing, as originally uſed, was in natural baths, and moſtly in rivers, which by the agitation of their waters, and their ſurfaces being conſtantly expoſed to the ſun, were in a ſtate of warmth, though much colder than the atmoſphere, and very different from the cold of artificial baths, the waters of which are in a ſtate of reſt, and ſhielded from the ſun, on which account theſe require greater caution when brought into uſe.

Bathing being much uſed in the Eaſt, it is but natural to ſuppoſe the inhabitants of towns which bordered on the ſea, from a ſcarcity of freſh water, were put oftentimes to the neceſſity of bathing in ſea-water; learning hence that ſea-water did not harm them, but contrarywiſe was ſerviceable in many reſpects, it became a phyſical concern; in early ages the prieſts were the phyſicians, through whom probably Hippocrates was enabled to write a whole book on water.

The Greeks, copying the Eaſtern people, made great uſe of baths, and the Romans after them, who uſed them to ſuch exceſs that they became a ſpecies of luxury; every ſtreet of Rome had baths, the emperors erected ſtately edifices, with baths for public uſe, and there was not a Roman of note who had not, within his houſe, a ſweating room, a hot, a temperate, and a cold bath. Pliny, in a letter to Gallus, deſcribing his villa, gives ſome idea of theſe by an account of his own; and the degree of elegance to which they carried theſe articles of luxury was amazing.* The uſe the Romans made of their baths was to fly to them as a material remedy in diſeaſe; in theſe caſes they uſed the temperate bath, hot bath, and ſometimes the ſweating room, to open the obſtructed pores, and breathe off the offending humours by ſweat; and the people of our own country, as their pores are ſo frequently liable to be ſhut up, by ſudden changes of weather, might derive advantages, in point of health, by more frequently bathing, than is at preſent cuſtomary among us.

When I was at Bath, the Duke of Kingſton was erecting a moſt elegant ſet of baths and ſweating rooms (for which ſpirited action he deſerves the thanks of the public) when the

* Montfaucon vol. III. p. 2. of his Hiſtory of Antiquities, gives a particular account of theſe baths.

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workmen found, by digging, the remains of a Roman ſtove, which proves that theſe people, while in poſſeſſion of our country, had a ſet of baths in that place, and thoſe of great extent, their flues having been traced to different ſides of the abbey church-yard; the many remains of Roman antiquities diſcovered at Bath by Dr. Guidot who analyſed and wrote on the waters, and others ſince him, I think ſufficiently prove theſe flues to be Roman.

Having recourſe to their baths when diſeaſed, were not the only advantages the Romans derived from them: They uſed them daily for pleaſure, and prevention of diſeaſe, they bathed conſtantly before dinner, after hunting or other athletic exerciſe; and though their country was in a warmer latitude than ours, no harm aroſe to them from this practice, but in theſe caſes, when the blood and humours were in agitation, they uſed the precaution to go firſt into the warm or temperate bath, to prepare them for the cold; Thus, from fatigue, their bodies were refreſhed; they were clean and cool, and remained in that ſtate till dinner time, after which they frequently indulged themſelves with ſleep.

I have brought this Roman mode of bathing into a point of view, that we may learn from them, to what extent we may uſe baths without injury. We find that no inconveniencies aroſe from their methods, they bathed after exerciſe, and fatigue, to recruit their ſpirits and ſtrength; and conſidering the ſerenity of their ſkies, and warmth of their atmoſphere, there was little danger likely to ariſe from bathing; but in a climate ſo variable as ours, it requires a greater degree of caution, for in our greateſt ſummer heats the pores of our bodies are often ſuddenly cloſed by a prevailing chilline ſs of the atmoſphere.

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When we uſe the cold bath for pleaſure, to prevent any injury from it, we ſhould bathe when our ſtomachs are empty and our ſpirits calm; to thoſe who uſe exerciſe no preparatory phyſic is required, agreeably to Hippocrates's opinion, but the indolent and ſedentary ſhould previouſly empty themſelves by art, that no future injuries may ariſe from a Plethora.

Though it is not prudent in our climate to uſe cold bathing, after the body has been heated by exerciſe, as practiced in hotter climates, we ſhould uſe exerciſe after bathing, and thoſe who cannot, ſhould have their limbs well rubbed, and their bodies warmly, but not hotly cloathed, to renew a proper degree of perſpiration.

Swimming is a noble exerciſe of the limbs, and cold bathing, ſimply conſidered, braces the body and adapts it for exerciſe, provided we do not uſe bathing to exceſs. The ſea, from the clearneſs and temperature of the water, (being warmer than river or ſpring water) is a deſirable bath, and with theſe advantages, by the action of the ſalts contained in it, we are not ſo liable to cold afterwards; and from the ſtimulus of the ſalts, the ſkin is excited to a diſcharge of whatever matter ſecretly obſtructs the pores; thus pimples appear, oftentimes, on the ſkin after ſea bathing, which are eaſily remedied by a continuation of that bathing. The only inconvenience attending ſea-bathing, as a pleaſure bath, proceeds from a glutenous adheſive property in the water, ariſing from the ſalts and bitumen contained in it, that leaves a clammineſs on the ſkin, which river and ſpring water do not.

Bathing in the ſea for uſe, as an invalid, is very different, in ſome reſpects, from bathing in the ſea for pleaſure, and ſhould not be entered upon but with caution; we know by experience,

experience, that ſea-water uſed externally and internally, is an excellent remedy for many complaints, and ſo much ſo, as to ſucceed, with proper helps, when every other means uſed by the ſkilful phyſician has failed; but from a remiſsneſs in the application, or by too great hurry or imprudence in the uſe of this remedy, oftentimes the patient is diſappointed in his hopes of a ſpeedy cure, and what Dr. Ruſſel, on this topic, has complained of very juſtly. "I am ſenſible, ſays he, many of my patients, from the inconvenience of being long abſent from buſineſs, or purſuit of their pleaſures, will be apt to hurry into a courſe of bathing before the body is altered, and ſufficiently prepared by drinking ſea water, or by a previous courſe of other remedies; which hurry is always detrimental to the patient, by protracting his cure."

Sea-water is a noble remedy for all diſeaſes of the ſkin, old ulcers, and diſeaſes of the glands, even hereditary complaints have yielded to it. Though Dr. Ruſſel is willing to ſuppoſe that no diſeaſes are hereditary, but in this particular I muſt differ from him, and that in glandular complaints, which he particularly writes upon. For inſtance, when a childing woman is diſeaſed with an old ſcorbutic, ſchrophulous, or leprous humour; during the time of uterine geſtation, ſhe is, to appearance, in a manner free from the complaint; but when not pregnant, her diſorder returns to the ſame ſtate as before; this is an obſervation I have made frequently, and particularly in leprous caſes. Without entering into a nice diſcuſſion of the ſubject, it is obvious from hence, that the humours are attracted by, and become a portion of the circulating humours in the embryo; and when this happens, a prognoſtic may be made, that the diſorder of the parent is incurable, however remediable it may be in her offspring, though,

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by proper care, the diſorder may be checked which, without ſuch helps, muſt become troubleſome at a critical period of life, if not ſooner.

But to the matter in hand; the body of the perſon who bathes ſhould be emptied previouſly, and if there are any external tumors or ſwellings or internal and containing matter, bathing is detrimental until the matter is diſcharged. Where the lips of a wound alſo are callous, or the induration of a tumor very great, *cold bathing* muſt be ommitted till it begins to abate, which is known by the feel, when the extremities of it become ſoft, and the whole detached and looſe; then cold bathing is ſerviceable towards compleating the cure. Dipping an invalid in the ſea, and taking him out again inſtantaneouſly, makes ſea-bathing of little more uſe than a bracer, and the effect ſcarce more than is common from every cold bath.

Bathing in the ſea conſtantly has this effect; every ſore, imperfectly healed, it will open afreſh; and when this happens, Dr. Ruſſel obſerves that the part affected being often bathed with ſea water, and rubbed with a ſlimy ſea plant called the Quercus Marina has a better effect than general bathing: The reaſon is obvious, the part being frequently wetted with the water, and ſalt ſlime of the plant, was kept moiſt; by this means the active principle of the water (the ſalt) had time to inſinuate itſelf; for ſea-ſalt has theſe particular properties, it not only corrects the corroſive and malign humours, that attend obſtinate and old ulcers, but poſſeſſes at the ſame time, a drying quality which contributes to heal them. I can give a familiar inſtance of this, which, for the benefitof ſociety, ought not to be concealed.

Sea-ſalt, properly applied, is a *preſent cure* for the *bite of a mad dog*.

Take ſea-ſalt, or common kitchen-ſalt, diſolve it in freſh warm human urine, load the urine with as much ſalt as it can diſſolve, with this liquor cleanſe the wound and limb, of whatever Saliva may ſtick to it, fill the wound with ſalt, wet a double rag in the prepared liquor, and bind it on the part, as it dries, wet it with freſh liquor; in ſix hours open and waſh the wound with the prepared liquor, fill it with freſh ſalt, apply the wetted rag, and proceed as before, in twelve hours the virus of the bite will be ſubdued: After this, keep the wound clean by waſhing it night and morning with a cloth dipt in the prepared ſalt liquor, 'till it is healed; let the party take as much ſea-water, for three mornings ſucceſſively, as will purge, and after each purging, at bed-time, an opiate of Mithridate diſſolved in pennyroyal water. The uſe of the ſea-water is to empty the body, and the uſe of the opiate to calm the ſpirits, which are generally, much agitated, and depreſſed on theſe occaſions. Let the patient bit be kept quiet, let him not live low, but moderately indulge himſelf with wine. This regimen need only be purſued till the wound is healed, but if the wound is large, or when there are more than one, the party may take a draught of ſea water daily, for a ſhort time.

The ratio of the cure conſiſts in the action of the ſalt upon the malign virus of the wound, before it can make any progreſs to infect the circulation. The ſalt, by being diſſolved in urine, becomes more active, and is particularly aſſimulated to penetrate into any part of the body to which it is applied. The ſucceſs of the application depends much, on the immediate time, the omiſſion of it for twenty-four hours, might render this remedy precarious, and, perhaps, of no effect. As the poiſon at firſt is local, this application to the part affected, immediately deſtroys all danger. The purg-

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ing therefore, with ſea water, the opiate at night, and the regimen preſcribed, are only cautionary aids, co-operating with the topical application.

Obſervation 1ſt. If ſalt, diſſolved in urine, can deſtroy the bite of a mad dog, may it not, applied in the ſame manner, deſtroy the virus of other animal poiſons?

2dly, May it not, on the ſame principle, weaken or deſtroy the power of vegetable poiſons, when local?

3dly, If it is found to deſtroy the force of animal and vegetable poiſons, ſeperately, will it not act on thoſe poiſons when combined?—— Thus may it not abate the danger of a wound given by a poiſoned weapon, as the compoſition with which theſe inſtruments are poiſoned, is thought to be a mixture of the vegetable and animal. From Monkſhood, and the poiſonous fluids of animals, of the Serpent, &c.

Where the cure has been neglected, and there appear ſymptoms of the Hydrophobia I ſay nothing in preference of this remedy, before that of

Dr. Mead's, by Ground Liverword and Pepper;

Or the Tonquin receipt, by Cinnabar and Muſk;

Or Dr. James's, by Mercury;

Or Dr. Nugent's, by Opium.

What we infer, by giving this cure a place here, is to illuſtrate the power of ſalt (the active principle of ſea-water) in deſtroying the acrimony and poiſonous quality of ſores, and wounds, and as ſuch diſpoſing them to heal.

Hence, by a proper uſe of ſea-water, obſtinate breakings out, old and inveterate ſores on any part of the body, diſeaſes of the glands, the evil, and even cancers (if the parts are not too much injured) may be remedied, ſea-bathing is ſerviceable alſo in rheumatiſms, painful contractions of the limbs, palſies, and epilepſies.

Reſpecting cancers it may not be amiſs to obſerve, that by keeping them conſtantly wet with cloths dipt in ſome of our Engliſh mineral waters, the malignity of them have bave been deſtroyed, and cures performed ; but I am inclined to think ſea-water more effectual. However, we cannot ſpeak too modeſtly on this head, as in confirmed cancers every kind of remedy hitherto known has failed.

Sea-water is ſerviceable, alſo, in ſome female complaints, and one in particular: In caſes of barreneſs, which are remediable, I look upon ſea water to ſtand before all other remedies. There is a remarkable fœcundity in ſea-water, beyond even the much famed mud of the river Nile. The mucilagious ſlime ſea-water contains, the innumerable variety and numerous produce of the ocean, in vegitables, inſects, and animals, the monſtrous generation, and unweildy bulk of ſome of which, that abound in quantities of fat and oil, and aſtoniſh human reaſon, are convincing proofs of it : And we know ſea-water to be a penetrating cleanſer a bracer, and to act on the human body freqnently by ſtimulus.

Before I quit the ſubject of cold bathing, it is neceſſary to obſerve, that the only time of bathing, at Brightelmſtone, is early in the morning, but to bathe in the middle of the day, or in the evening, is equally beneficial; nay, in ſome reſpects, is to be preferred to the morning, for when the cold winds of Autumn (or in fact, of any other time of the year) prevail, expoſing the body to them, is dangerous, before the genial

genial influence of the Sun has warmed them. And ſea-bathing, as a remedy, will often fail, nay ſometimes do harm, unleſs regulated by the phyſician, and proper medicines uſed at the ſame time, to the ſucceſs of which, ſea-water is a material agent in compleating a cure, by co-operating with them, but cannot perform the great things ſome expect from it of itſelf.

We ſhall now treat a little on warm bathing.—Cold bathing, ſimply conſidered, is a bracer, but we recommend ſea-bathing for ſomething more, for the benefits derivable from the Salt and Bitumen contained in this water, which makes it a deſirable agent in removing ſome particular obſtinate diſorders, moſt of which have been pointed out already. Where a diſorder is very obſtinate, and has been of long ſtanding, bathing in the ſea (cold bathing being a bracer) in the beginning of a cure is oftentimes improper, which Dr. Ruſſel alſo obſerved, and he was obliged, in ſuch caſes to have recourſe to the medicated warm bath.

As the active principle of ſea-water is the ſalt contained in it, by the uſe of a temperate and hot bath of ſea-water, many great advantages may be derived; inſtead of bracing and cloſing the pores of the ſkin, which is the conſequence attending cold bathing, the hot bath would open them, and by the activity of the ſalt contained in the water, penetrate through every obſtruction with which it comes into contact. If in this ſenſe we derive benefit from cold bathing, how much greater muſt be the benefit received from hot bathing?

From the good effects of the hot bath uſed in Epileptic and maniacal caſes (ſee Dr. Shaw's obſervations on hot bathing), it is natural to ſuppoſe that the madneſs and Hydrophobia cauſed by the bite of a mad dog, being neglected, is curable by a hot bath of ſalt-water.

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Convulſions are produced by a ſtimulus on the nerves, which cauſes them to contract themſelves. Opium may abate the convulſions and furor of canine madneſs for a time, by the ſtupor it produces on the nervous ſyſtem ; as ſuch it is a deſirable medecine : But as ſalt is deſtructive of this poiſon, it being inſinuated by the pores into the body, by means of heat and moiſture, it will relax the habit, mix with the fluids, and probably will deſtroy the virus ; and as ſweating is the conſequence of hot bathing, ſo it may ſend off by the ſkin what is offenſive to nature, and is the cure on which there is moſt dependence ; though I would not recommend the uſe of opium to be wholly laid aſide, for reaſons juſt given, but to uſe diſcretionally both remedies, as aſſiſtants to each other.

Dr. Ruſſel rightly obſerves, that in ſcrophulous diſeaſes the glands of the myſentery are always affected ; Dr. Andree, in his Orthopœia obſerves the ſame of the meſentery of rickety children, and Heiſter the ſame, but contradicts himſelf to oppoſe Cheſelden. As the glands of the belly, in theſe caſes, are primarily affected, nothing can remove theſe rugoſe and knotty ſwellings, and lay the proper foundatian of a cure ſo readily, and effectually, as a temperate or hot ſea bath, by which we make an application, immediately to the part, of a penetrating and reſolving diſcutient. We find, even in hot countries, that they have their hot baths as well as cold, which they uſe to open the pores of the body when obſtructed, and breathe off by them whatever is offenſive to nature. Indeed the preference of the hot bath over the cold, in the cure of ſome diſeaſes, is a ſubject that would admit of much diſcuſſion, and in defence of which, many authorities might be quoted, were it not ſo obvious that it needs none.

To make therefore bathing in ſea-water more effectual, I would recommend the uſe of hot baths made of ſea-water, to

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different degrees of heat, as the nature of the diſeaſe may require. The proviſion of a bathing-tub, copper, and the inconvenience of carrying daily water to a houſe diſtant from the ſea, in a ſufficient quantity to make a bath, has ſo much trouble and expence attending it, that a patient will not have recourſe to it, though neceſſary; nor can the phyſician well recommend it under ſuch diſadvantages.

The town of Brightelmſtone has been much favoured by the countenance of many noble and genteel families, who reſort to it every ſeaſon; in return, every means ſhould be, and I believe is put in practice to accommodate them, more eſpecially thoſe who are ſo unhappy as to be invalids.——For this purpoſe I wiſh to ſee a ſet of baths erected.

The building to contain theſe baths muſt be near the ſea, on account of the water, I would recommend the bathing rooms to be finiſhed in a plain but neat taſte, and the baths themſelves, reſpecting ſhape and ſize, to be nearly ſimilar to thoſe erected by the Duke of Kingſton at Bath.

A building whoſe area is thirty feet, and twelve feet high, will admit of four rooms, with a bath in each, a loby for ſervants to wait in, with a ſpace behind them the whole length of the building, for the copper, the fuel, and cold bath, which muſt be kept ſupplied with freſh ſea-water pumped out of the ſea at half tide. One end of this room may be made alſo a ſweating room, by a proper ſerpentine diſpoſal of the copper flue; there muſt be a communication, by pipes, from the copper to the baths, and a like communication from the reſervoir, that the baths, by this means, may be attemperated to any degreeof heat required; and here it is neceſſary to obſerve, unleſs ordered otherwiſe by the phyſician, that a hot bath ſhould never exceed the natural heat of the body, and any medium between 50 and 80 degrees of Farenheit's thermometer will be a good

a good ſtandard ; for if at blood heat it may overcome and weaken the party too powerfully, but while in the bath the heat muſt be kept up by the addition of hot water.

There ſhould be chairs provided alſo, as at Bath, to take the patient from, and back again to the bed ſide, for the advantage afterwards of ſweating or taking reſt, as the nature of the illneſs may require.

The utility of theſe baths is obvious; they may be uſed either for hot or cold bathing ; there are ſome invalids to whom cold bathing would be ſerviceable, could they be able to bear the fatigue of being dipt into the ſea, and (what is more material) to be expoſed to the cold air. If the weather happens to be ſtormy, and the ſea ſo rough as not to admit of bathing in it, recourſe may be had to the baths ; by this means bathing would become more univerſal, be unattended with terror, no cure protracted, and the ſtay of the company prolonged. Moreover Invalids would have the advantage of this bathing remedy all the year round, whereas, on account of the variableneſs of our climate, it is denied them at preſent, except in the Summer months, and then only in calm weather.

We come next to the Drinking of Sea-water.

To drinkſea-water is certainly of great uſe in many caſes, it cleanſes the glands, and excites them to a diſcharge of whatever obſtructs them, &c. but there are inconveniences that ariſe from the conſtant uſe of it, which ought to be provided againſt. There are many conſtitutions too delicate, and ſtomachs too weak to bear the nauſea and ſickneſs it produces, and even where this inconvenience is overcome by ſtruggles, it makes the party very thirſty the remainder of the day. Theſe are material objections to the conſtant uſe of it, and unleſs uſed conſtantly we cannot expect to derive much benefit from it.

To

When it is taken two or three times, in quality of a purge, the ſickneſs it produces is not detrimental, but on the contrary, often ſerviceable, and a good preparative to a courſe of bathing, where pleaſure moſtly is concerned ; but when it is meant to be continued, as an alterative diluent, it will not do. For example, in a glandular conſumption, where conſtantly purging the body is not deſired, and weakens the patient.

To remedy theſe inconveniencies, I would recommend the ſea-water to be drank every morning in ſmall quantities, not to exceed a quarter of a pint at one time, and that mixed with an equal quantity of new milk, by this means the ſickneſs and thirſt will be prevented, and thus united, become a noble medicine, they are correctors to each other, and neither the milk or ſea-water, ſo combined, will diſagree with the ſtomach, that could not bear either of them ſeparately.

When ſea-water is required as a gentle purge, and the ſtomach not able to bear it, I recommend the following---

Take of ſea-water and milk each four ounces ; put them over the fire ; and when they begin to boil, add a ſufficiency of Cremor Tartar to turn into whey, ſtrain it from the curd, and when cool drink it.

Sea-water thus managed is a great cleanſer, a purifier of the blood, and a cooler ; whereas, ſea-water taken alone is heating to many conſtitutions. Some may imagine, by the addition of Cremor Tartar to the ſea water, the efficacy of it, as a medicine is abated, on the contrary, it has all the advantages ſea-water can poſſeſs as an aperient or purge, without any of the diſadvantages attending the uſe of it when alone ; except in ſome very particular caſes.

Before I quit the ſubject, it is neceſſary to give one caution about drinking ſea-water.

As the complaints for which it is conſtantly drank are generally very obſtinate, ſome one mercurial preparation may be

recommended to be taken at the ſame time; but I would recommend to the patient carefully to avoid every preparation of mercury (nleſs particularly ordered by the phyſician): For by the action of ſea ſalt on mercury, it is converted into a violent poiſon, not unlike corroſive ſublimate, and may prove very injurious to the conſtitution, more eſpecially to the nervous ſyſtem.

Having finiſhed theſe curſory hints on bathing for pleaſure, for uſe as an invalid, on the advantages derivable from hot ſalt-water baths, and made ſome obſervations on drinking ſea-water, I ſhall conclude.

Brighthelmſton,
Sept. 8, 1768.

Yours, &c.

APPENDIX.

APPENDIX.

In my Thoughts on Brighthelmſton, publiſhed *anno* 1768, a Deſcription of a Plan was given for erecting a ſet of ſalt water Baths; but to my ſurprize I found no advancements made towards carrying this, or any other of the like kind, into execution: to my ſurprize, I ſay, when a plan ſo uſeful to the public, and neceſſary to the general intereſt of the inhabitants of Brighthelmſton was neglected: uſeful to the public, by the ſea water on this coaſt being undefiled by the flow of filth and freſh waters (the neareſt river being ſeveral miles diſtant) and neceſſary to the inhabitants, by producing a greater reſort of company. Theſe determined me to undertake the troubleſome office, and the plan being enlarged, it makes a further deſcription, together with the uſes it is intended to anſwer, neceſſary.

SEA water is deſervedly recommended by the Faculty, it being a Remedy for ſome obſtinate complaints; and bathing in it is a particular object with the Surgeon, owing to the property it has of correcting the acrimony of ſpreading ulcers, and diſſolving indolent tumors; but is a Remedy which proves ſometimes precarious, and ſometimes ineffectual. This failure is not to be attributed to wrong advice, but to the inattention of the patient, who too frequently purſues it with negligence, and uſes it with impropriety. Of this truth I have ſufficient proofs, having been conſulted by ſeveral when at Brighthelmſton, who rendered themſelves ill, merely from the imprudent uſe of bathing, which was recommended in their caſes with propriety, and if well-regulated would have proved ſalutary.

To prove the advantages of bathing in a private room, and in pure ſea-water, preferably to that, where the body

dy is openly expoſed to a cold, humid, piercing air, in ſhallow water, where the waves are fouled with ſand, and ſea weeds, (which is always the caſe in ſtormy weather) need, but few arguments, amongſt others, being decently retired elegantly neat, and ſtrictly juſt in a well regulated perſeverance of this remedy, are not the leaſt.

There are yet greater advantages to be derived from private baths, we may uſe them warm or hot, inſtead of cold, by which the efficacy of bathing, in particular caſes, will be greatly increaſed: though warm baths of ſea-water are not much uſed by the moderns, we have antient authorities in ſupport of them; Hippocrates recommends the warm bath of ſea-water, ſo does Galen; Dioſcorides alſo further informs us, L. 5. C. 15. that ſea-water, applied warm, cleanſes and diſcuſſes, is ſervicable in diſorders of the tendons, that it corrects eruptions and foulneſſes of the ſkin, ſuch as the itch, tetters and vermin; that it is uſeful in turgid tumors of the breaſts, bruiſes of the ſkin, bites of venomous animals, in chronic diſtempers of the body, and diſorders of the nerves.

Theſe great men of antiquity, when they ſpoke in favour of warm bathing, knew that the diſcutient and reſolvent properties of ſea-water were obtained by permeating the pores, which was promoted by warmth and relaxation; whereas in an unheated ſtate, the coldneſs of the water exceeding the temperature of the body, it was denied enterance by ſhutting up and bracing them; the general conſequence of cold bathing.

On this account, we do not confine ourſelves to baths of immerſion; we have provided recumbent baths, a ſemicupium, and partial baths; alſo a ſalt-water vapour bath, which may be uſed partially to any particular part, or univerſally over the whole body.

The

The warm bath, even in caſes of health, is a good preparative to cold bathing; it opens the pores of the ſkin in a powerful manner, whereby they are freed from numerous little foulneſſes which obſtruct them, and are the forerunning cauſe of many diſtempers.

We all know the utility of baths in complaints of the ſkin, the ſcurvy, diſeaſes of the glands, the joints and limbs: To enumerate all the variety of bodily ills, wherein benefits are to be derived from the judicious uſe of Sea-water, hot as well as cold, would produce an endleſs catalogue of diſeaſes; the wiſe practitioner knows them already, to others they would prove diſguſtful; I ſhall deſcribe therefore the baths at large, and the apparatus provided for them, that it may be known how far they are uſeful, and and that the Faculty may advantageouſly call in their aid to the Healing Art, with ſome degree of certainty.

The building which contains theſe baths is cloſe to the ſhore, but ſo happily ſituated as to be ſhielded from the wind; the water is received into a large reſervoir every tide, through upwards of 300 feet of wooden pipes, that extend to the diſtance of low-water mark; by this means, we obtain the ſea-water in perfect ſtrength and purity; from this reſervoir within the building, the different baths and boilers for heating the water are ſupplied.

I. The Balneum Frigidum, or Cold Plunging-Bath.

This is ſupplied with a conſtant ſtream of ſea-water, dur- the hours of morning, whilſt in uſe; by this means a regular ſucceſſion of pure water is kept up. There are two of theſe baths of different depths; one for Gentlemen, the other for Ladies, each of them large enough to plunge into without danger of ſtriking againſt the ſides or bottom.

II. The

II. The Balneum Extemporaneum, or Temporary Cold Bath.

This is provided for thoſe whoſe fears will not permit them to plunge, and for the Helpleſs.

III. The Balneum Calidum recumbens, or Hot Bath.

Theſe baths are preparatives to cold-bathing, and alſo to a courſe of drinking the mineral ſpring: they are materially uſeful in diſeaſes of the ſkin, the ſcurvy, diſtempered glands, &c.

IV. The Semicupium, or Half Bath.

In this the patient may ſit for diſorders in the bowels, nephritic pains, ſome female complaints, &c. This may be uſed alſo as a temperate bath, for pleaſure and cleanlineſs.

V. The Pediluvium, or Bath for the Feet and Legs.

This is movable, and may be carried to the bed-ſide: This bath is provided for the head-ach, pains, tumors, indurations and contractions of the lower extremities.

VI. The Balneum Particulare, or Pump-Bath.

Here water, hot or cold, is thrown with a degree of force in one continued ſtream, on any part required; to benefit palſied limbs, fixed rheumatic pains, ſtiffneſſes of the joints, proceeding from the gout, indolent tumors, ſchrophulous indurations, &c.

VII. The Balneum Vaporoſum, or Sweating-Bath, produced by the Vapor of Sea-Water.

This is recommended by Dioſcorides for dropſies, pains in the head, and deafneſſes: This hot vapor may be diffuſed over the whole body, or applied to any particular part of it, according

according to the nature of the caſe. I confeſs myſelf ſanguine in behalf of ſo peculiar an application; it is not unnatural to ſuppoſe that even Cancers may yield to it.

The rooms containing theſe baths are diſtinct; and the materials with which the baths are conſtructed are ſtone, marble, and Dutch tiles, varied according to their uſes; to each of the hot baths there are two cocks, one for the ſupply of hot, the other of cold water, by which the baths may be made to any temperature required; immediately after the bathing of every perſon the whole is emptied, and the bath cleaned for the reception of freſh water. To render theſe as convenient and ſalutary as poſſible, we have provided chairs adapted to carry patients to the baths, and return them to their bed-ſides, after the manner practiſed at Bath.

Independent of the purity of the air and ſea-water on this coaſt there is one circumſtance which makes Brighthelmſton preferable to moſt other bathing places. Within a little walk of the town, there is a mineral chalybeat ſpring, highly impregnated, which may be drank to advantage during a courſe of bathing, when the drinking of ſea water is judged improper.

F I N I S.